



## CONSERVATION ENHANCEMENT ACTIVITY

E528U

# CONSERVATION STEWARDSHIP PROGRAM

### Contingency Planning for Resiliency

#### Conservation Practice 528: Prescribed Grazing

**APPLICABLE LAND USE:** Crop (Annual and Mixed), Crop (Perennial), Pasture, Range, Forest

**RESOURCE CONCERN:** Animal, Plant

**ENHANCEMENT LIFE SPAN:** 1 Year

#### Enhancement Description

Develop and implement detailed contingency plans that address major disturbances (drought, fire, flooding, insect infestations, etc) for grazing lands on the operation. Incorporate drought or other weather forecasting tools and agency approved climate projections within the contingency plans. Incorporate resilience building techniques in the grazing plan to mitigate effects of major disturbances.

#### Criteria

- Develop a written plan that matches forage quality and quantity to grazing and/or browsing animal demands for **the entire year** (both growing and non-growing season). This would include both grazed, stored and fed feed, and other grazing resources. (Not all acres may need to be contracted, but this would cover the entire season when animals are on-farm). Recommended strategies could be:
  - Incorporate longer rest periods to increase recovery of grazing resources and improve resiliency after drought events or other major disturbances.
  - Utilize non-traditional grazing resources such as annual forages, crop residues, perennial cropland (hayland), etc. when developing a year-round grazing plan.



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- Maintain conservative stocking rates as a drought contingency strategy to minimize detrimental consequences during drought on economic and ecological sustainability (when applicable).
- Incorporate other technologies such as bale grazing on hayland, degraded rangeland, or cropland to improve resiliency by increasing organic matter etc.
- Incorporate other strategies as recommended by local NRCS or other grazing experts from the region.
- Enhance diversity of rangeland plants to optimize grazing unit resiliency by managing the intensity, frequency, timing, and duration of grazing and/or browsing needed as determined by a planning process that includes:
  - Clear objectives,
  - Resource inventory of structural improvements, existing resource conditions, forage inventory including all grazable acres on operation,
  - Grazing plan,
  - Contingency plan, and
  - Monitoring plan.
- Develop a written contingency plan that includes the following:
  - Type of contingency planned for (drought, fire, flood, insect infestation, etc.),
  - Trigger points (or dates) for making stocking rate decisions,
  - Types, locations, and information for available additional forage resources (purchased or stockpiled hay, grazing cropland resources, off-farm forage resources, etc.),
  - Culling procedures (if any) (including all stages of animals in animal inventory, i.e., cow/calf, stockers, yearlings, bulls, ewe/lambs, rams, etc.; and time frame when to market during what conditions etc.),
  - Judicious use of local or national drought forecasting tools to inform trigger date decisions (GrassCast, SD Drought Tool, etc.), and



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- Use of drought forecasting tools and soil water forecasts where available to promote the accuracy of forage production projections. See supplemental information for local resources (if any).
- Implement contingency plan (when needed) and develop new updated contingency plan as conditions change (this is an ongoing process).
- Develop a monitoring plan that helps measure resiliency on the operation. This should include each of the following subcategories:
  - Soil monitoring techniques such as soil tests for organic matter, PLFAs, Haney test, etc.
  - Includes monitoring techniques to determine soil cover.
    - Soil cover should be compared to an Ecological Site Description or Rangeland Health Evaluation matrix to determine if the amounts present are appropriate for the site.
  - Plant species diversity monitoring techniques.
  - Any other appropriate monitoring techniques to help determine positive changes in site resiliency.



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### Documentation and Implementation Requirements:

#### Participant will:

- Prior to implementation, review NRCS Conservation Practice Standards Prescribed Grazing (Code 528), including any state approved job sheets or worksheets.
- Prior to implementation work with NRCS to complete a forage inventory of operational resources.
- Prior to implementation provide locations of fence, watering facilities and infrastructure, additional non-traditional grazing resources, etc.
- During implementation, keep records of actual use (dates, grazing/browsing period, number of head).
- During implementation, collect monitoring data for use to determine trigger dates, such as precipitation data, fire occurrences, flooding occurrences, forage availability, etc.
- During implementation, consult with NRCS to adjust and adapt the plan to current conditions to verify changes needed to meet enhancement criteria. Changes to the plan will be documented in writing.
- After implementation, make the following items available for review by NRCS to verify implementation of the enhancement:
  - Grazing management plan,
  - Contingency plan,
  - Monitoring data and actual use records, and
  - Any documented changes to the plan as result of drought contingency plan or monitoring data.



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**NRCS will:**

- As needed, provide technical assistance to the participant as requested.
- Prior to implementation, provide and explain NRCS Conservation Practice Standards Prescribed Grazing (Code 528) as they relate to implementing this enhancement, including any state approved job sheets or work sheets.
- Prior to implementation, assist the participant with development of a grazing plan, if requested. If NRCS does not assist with plan development, the plan(s) will be reviewed by NRCS for approval prior to implementation to confirm the written objectives meet the criteria of the enhancement.
- After implementation, review actual use and monitoring data used to implement grazing strategy and provide recommendations for adjustments, or additional practices to facilitate future improvements in contingency planning and resilience.
- During implementation, as requested, assist the participant with adapting the grazing strategy and plan to current conditions.
- After implementation, review grazing plan, records, and documentation to verify the enhancement was implemented to meet the criteria.

**NRCS Documentation Review:**

I have reviewed all required participant documentation and have determined the participant has implemented the enhancement and met all criteria and requirements.

Participant Name \_\_\_\_\_ Contract Number \_\_\_\_\_

Total Amount Applied \_\_\_\_\_ Fiscal Year Completed \_\_\_\_\_

\_\_\_\_\_

NRCS Technical Adequacy Signature

Date



## Washington Supplement To Conservation Enhancement Activity

### References for Washington Conservation Practice 528 (Prescribed Grazing) Enhancements

- **NRCS Prescribed Grazing Conservation Practice Standard 528** can be found in FOTG Section 4, Practice Standards and Supporting Documents/Prescribed Grazing (AC) (528) folder, <https://efotg.sc.egov.usda.gov/#/>
- **Guidance on Conservation Planning for Grazing Lands** can be found in chapter 11 of the **USDA NRCS National Range and Pasture Handbook**. Located in - eDirectives – Handbooks – Title 190 – Ecological Sciences – Part 645 – National Range and Pasture Handbook
- **Washington State University – AgWeatherNet** provides Washington State Farmers, gardeners, researchers and policy makers with weather data and weather related decision-support tools. <http://weather.prosser.wsu.edu/>
- **U.S. Drought Monitor** website. The U.S. Drought Monitor (USDM) provides a map every Thursday showing where drought is and how bad it is. The website also provides a monthly drought outlook from the Climate Prediction Center. <https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?WA>
- **Soil Testing Information** - WSU Soils & Laboratory Testing, Puyallup Research & Extension Center <https://puyallup.wsu.edu/soils/soils/>
- **Ecological Site Descriptions** and **Forage Suitability Groups** can be found in the **NRCSField Office Technical Guide** <https://efotg.sc.egov.usda.gov/#/> in Section 2. For planning unit ecological sites and forage suitability groups see bullet below.
- **Soils, Ecological Sites** and **Forage Suitability Groups** for planning unit can be found by using the **Web Soil Survey** <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>
- **Interpreting Indicators of Rangeland Health Version 5**, Technical Reference 1734-6 (Range Technical Note 103 Rangeland Health Assessment) can be found in the NRCSField Office Technical Guide (FOTG) in Section 1 General Resource References/Reference Lists/Technical Notes by Discipline/Range folder <https://efotg.sc.egov.usda.gov/#/> The accompanying RHA Evaluation Sheet is located in the same folder.

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- **Pasture Condition Scoring** documents can be found in **NRCS Field Office Technical Guide**: in Section 1/Reference Lists/Technical Notes by Discipline/Pasture folder. <https://efotg.sc.egov.usda.gov/#/> The accompanying Pasture Condition Scoresheet is located in the same folder.
  - Pasture Technical Note No. 105. **The Western Oregon and Washington Pasture Calendar**, A Pacific Northwest Extension Publication PNW 699. Oregon State University, University of Idaho, Washington State University. <https://catalog.extension.oregonstate.edu/sites/catalog/files/project/pdf/pnw699.pdf>
  - **Prescribed Grazing (528) Design Worksheet/s**. This document has several useful worksheets for developing grazing plans. It can be found in the **NRCS Field Office Technical Guide** Section 4 Practice Standards and Supporting Documents/Prescribed Grazing (528) folder. <https://efotg.sc.egov.usda.gov/#/>
  - Other **Prescribed Grazing (528) documents** (e.g. *Utilization Monitoring Worksheets, Implementation Requirements, IR's, Planning Guides, etc.*) can also be found in the **NRCS Field Office Technical Guide (FOTG)** , in Section 4 Practice Standards and Supporting Documents /Prescribed Grazing (528) folder. <https://efotg.sc.egov.usda.gov/#/>
  - Information on native and non-native grass species critical growth periods can be found in **Range Technical Note 34**. This can be found in the NRCS Field Office Technical Guide: Section 1/Reference Lists/Technical Notes by Discipline/Range folder. <https://efotg.sc.egov.usda.gov/#/>
  - **Idaho Forage Handbook BUL 547 Third Edition**  
University of Idaho Extension, Moscow, Idaho. Information on hay and pasture management. Located on the WA SharePoint site in the Shared Documents/Range\_Pasture\_Forage folder. <https://www.uidaho.edu/extension/publications/publication-detail?id=bul0547>
- Monitoring Manual for Grassland, Shrubland and Savanna Ecosystems**, Volume I: Quick Start. [https://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb5172119.pdf](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5172119.pdf)
- **Herbaceous Stubble Height as a Warning of Impending Cattle Grazing Damage to Riparian Areas**. Hall, Frederick C.; Bryant, Larry. 1995 Gen. Tech. Rep. PNW-GTR-362. USDA Forest Service, Pacific Northwest Research Station. 9 p. <https://www.treearch.fs.fed.us/pubs/3062>
  - **The Grazed-Class Method to Estimate Forage Utilization**. University of Idaho Library. This publication provides an explanation of the grazed class method of estimating forage utilization, including necessary data sheets. <https://www.lib.uidaho.edu/digital/fwres/items/fwres187.html>